

SECOR INTERNATIONAL INCORPORATED www.secor.com

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December 16, 2005

Project No. 08CH.51834.05

Ms. Carol Spangenberg
County of San Diego, Department of Environmental Health (DEH)
Land and Water Quality Division (LWQD), Site Assessment and Mitigation (SAM) Program
P.O. Box 129261
San Diego, California 92112-9261

Subject:

60-Day Drilling Report

Former Chevron Service Station No. 9-1834

4175 Voltaire Street San Diego, CA 92107

Reference:

Well Permit No. LMON 103441

EST # H12455

APN # 449-251-21-00

Dear Ms. Spangenberg:

On behalf of Chevron Environmental Management Company (Chevron), SECOR International Incorporated (SECOR) is submitting this 60-Day Drilling Report to summarize the results of drilling activities conducted at Former Chevron Service Station No. 9-1834 (the Site; Figure 1) at 4175 Voltaire Street in San Diego, California. SECOR submitted a work plan dated July 10, 2005 for advancing and sampling five soil borings. The LWQD approved the work plan in a letter dated July 11, 2005. All drilling activities were performed under LWQD-SAM permit #LMON 103441 (Attachment 1). All of the field activities were performed in accordance with San Diego County well construction standards as outlined in Appendix B of the 2004 SAM Manual, issued February 18, 2004. The locations of the soil boring are shown on Figure 2.

Drilling Activities

From October 18 through October 19, 2005, SECOR personnel working under the direction of a California Professional Geologist supervised the advancement of five soil borings to depths ranging from 65 to 80 feet below ground surface (bgs). Drilling operations were conducted by Cascade Drilling Incorporated (CDI), using a CME-75 drill rig equipped with 10-inch-diameter, continuous-flight, hollow-stem augers (HSAs). SECOR personnel collected soil samples at 5-foot depth intervals (from 10 to 80 feet bgs). All five soil borings were drilled to varying depths beginning with CB-1, drilled to 75 feet bgs, CB-2 drilled to 65 feet bgs, CB-3 drilled to 70 feet bgs, CB-4 drilled to 80 feet bgs, and CB-5 drilled to 75 feet bgs. Table 1 outlines the construction materials used to fill the soil borings upon completion of sampling.

Sampling

Retrieved samples were submitted to a State-approved laboratory for analytical testing of motor fuel indicator chemicals. During the HSA drilling activities, a SECOR geologist logged each well boring from drill cuttings. Each of the soil borings were captured utilizing a split spoon sampler consisting of three brass sleeves. The cuttings taken from these brass sleeves were described using visual-manual methods and classified by the Unified Soil Classification System (USCS). Soil color

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descriptions were referenced from Geological Society of America's Rock-Color Chart published in 1991. One brass sleeve containing a soil boring from each 5 foot sample interval was capped at both ends with Teflon film and stored in an ice packed cooler, to preserve any detectable hydrocarbons for further analysis. Drill cuttings were containerized in properly labeled 55-gallon steel open head drums (with locking lids) and stored at a central location on-site pending determination of appropriate disposal and off-site transport to the designated treatment, storage, and disposal facility (if hazardous waste) or landfill (if non-hazardous waste). Backfilling of the soil borings was completed utilizing bentonite grout and chips (Table 1). CB-1 was backfilled from 75 feet bgs up to 1 foot bgs using 8 bags of bentonite grout topped with 1 bag of bentonite chips. CB-2 was backfilled from 65 feet bgs up to 1 foot bgs using 6 bags of bentonite grout and 1 bag of bentonite chips. CB-3 was backfilled from 70 feet bgs up to 1 foot bgs using 8 bags of bentonite grout topped with 1 bag of bentonite chips. CB-4 was backfilled from 80 feet bgs up to 1 foot bgs using 9 bags of bentonite grout and 1 bag of bentonite chips. CB-5 was backfilled from 70 feet bgs up to 1 foot bgs using 8 bags of bentonite grout topped with 1 bag of bentonite chips. The remaining foot of backfill for each borehole was completed using native soil.

The borehole logs, site location map, site plan, and well permit cover sheet are provided as attachments to this report. A Site Assessment Report (SAR) will be prepared which will include details of the boring activities, geologic cross sections, laboratory reports, and summary tables of the analytical results.

If any additional information is required, please contact the undersigned at (619) 296-6195.

Respectfully submitted,

SECOR International Incorporated

Prepared By:

Reviewed By:

Approved By:

Jeremiah S. Santini Staff Geologist

Kimberly N. Thompson Project Manager

Clifford R. Pollock, CHG#514 Principal Engineering Geologist

Enclosures:

Figure 1 – Site Location Map

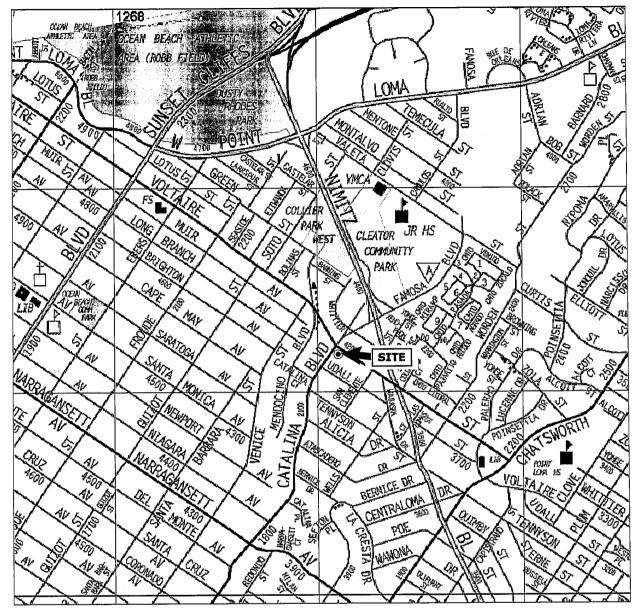
Figure 2 – Site Plan with Soil Boring Locations Table 1 - Construction Materials for Soil Borings

Attachment 1 – Well Permit Cover Sheet

Attachment 2 - Borehole Logs and Borehole/Well Log Legend

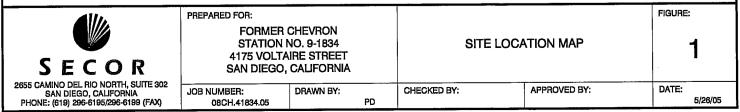
cc: Mr. Eric Roehl, Chevron Environmental Management Company Mr. Kent Huth, County of San Diego LWQD, SAM Program

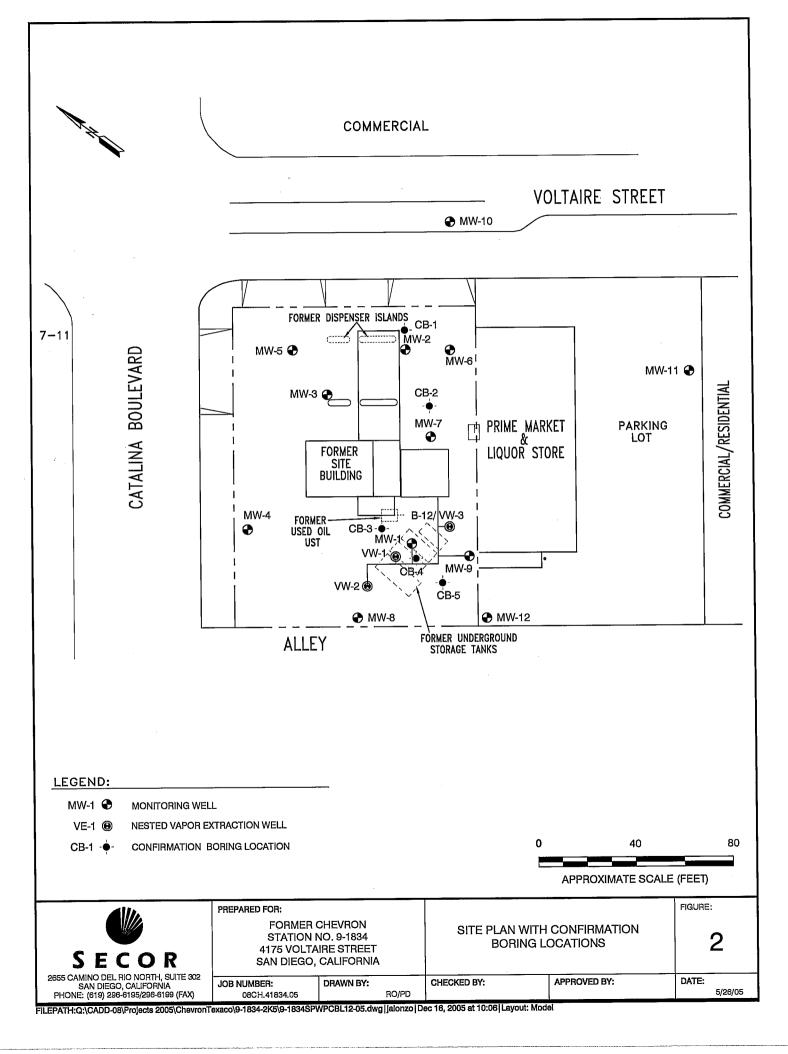
FIGURES



REFERENCE: THOMAS GUIDE CD-ROM, PAGE & GRID 1268 B6.







TABLE

Former Chevron Service Station No. 9-1834 Construction Materials for Soil Borings 4175 Voltaire St. San Diego, CA Table 1

	G H		Bags of	Bags of	7000	Cond Fill	Bentonite Chip Bentonite	Bentonite	Concrete
Boring/well	Boring/well Total Boring	Bags or	Bentonite	Bentonite	_	Callul III	Fill Volume	Grout Fill	77-1-11-11-11-11-11-11-11-11-11-11-11-11
Number	Number Depth (bgs)*	Sand	Chips***	Grout ****	Concrete	Volume (π ⁻)	(ft³)	Volume (ft³)	volume (π)
CB-1	75	1	1.0	8.0	•	1	0.55	28	1
CB-2	65	ı	1.00	6.0	-	•	0.55	21.0	I
CB-3	02	ı	1.0	8.0	•	ı	0.55	28.0	I
CB-4	80	ı	1.0	9.0	-	_	0.55	31.50	ı
CB-5	02	ı	1.0	8.0	-	-	0.55	28.00	1

Notes:

-- = not used

* Below Ground Surface

** Sand bags were 100-pounds (lbs) each
*** Bentonite chip bags were 70-lbs each

**** Bentonite grout bags were 50-lbs each

***** Concrete bags were 70-lbs each

 $ft^3 = cubic feet$

ATTACHMENT 1

Well Permit #LMON 103441 Cover Sheet



PERMIT #LMON103441 A.P.N. #449-251-21-00 EST #H12455

COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH LAND AND WATER QUALITY DIVISION MONITORING WELL PROGRAM SOIL BORING CONSTRUCTION PERMIT

SITE NAME: FORMER CHEVRON STATION 9-1834

SITE ADDRESS: 4175 VOLTAIRE ST, SAN DIEGO 92107

PERMIT FOR: 5 BORINGS

PERMIT APPROVAL DATE: OCTOBER 4, 2005

PERMIT EXPIRES ON: FEBRUARY 1, 2006

RESPONSIBLE PARTY: CHEVRON ENVIRONMENTAL MGMT CO

PERMIT CONDITIONS:

- All borings must be sealed from the bottom of the boring to the ground surface with an approved sealing material as specified in California Well Standards Bulletin 74-90, Part III. Section 19.D. Drill cuttings are not an acceptable fill material.
- 2. All berings must be properly destroyed within 24 hours of drilling
- Placement of any sealing material at a depth greater than 30 feet must be done using the tremie method.
- All water and soil resulting from the activities covered by this permit must be managed, 4. stored and disposed of as specified in the SAM Manual in Section 5, II, E- 4. (http://www.sdcounty.ca.gov/deh/lwg/sam/manual_guidelines.html)// In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.
- Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must 5. include all items required by the SAM Manual, Section 5, Pages 6 & 7.
- 6. This office must be given 48 hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at 619) 338-2339.

NOTE:

This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.

APPROVED BY:

ERNIE/L. PROFETA

DATE: 10/04/2005

DEH: SAM-9075 (4/03)

ATTACHMENT 2

Borehole Logs and Borehole/Well Log Legend

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-1 SECOR PAGE 1 OF 2 PROJECT NUMBER: 08CH.51834.05 EASTING (ft): NORTHING (ft): COMPLETED: 10/18/05 DRILLING: STARTED 10/18/05 LONGITUDE: LATITUDE: INSTALLATION: STARTED 10/18/05 **COMPLETED: 10/18/05** TOC ELEV (ft): GROUND ELEV (ft): DRILLING COMPANY: Cascade BOREHOLE DEPTH (ft):76.5 INITIAL DTW (ft): NE DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (in)8 DRILLING METHOD: HSA WELL CASING DIAMETER (in):---CHECKED BY: CR RED DE LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample Graphic Log Recov. Blow Count PID (units) Depth (feet) uscs Time & Depth (feet) Borehole Time Description Backfill Sample ID SILTY SAND: SM; (10YR 4/2) dark SM SOIL yellowish brown; fine to medium-grained; loose; no odor; dry with moisture 4'-6', slight micaceous (Air Knife 0-8' bgs) Bentonite Chips 45% 5 SILTY SAND WITH CLAY, SM; (5YR 3/4) SM light brown; fine to medium-grained; loose; dry to moist; no odor; slight micaceous 1040 12.5 10 1040 10 CB-1@10' 9 11 1046 10.8 15 1046 15 7 CB-1@15' ML SANDY SILT: ML; (10YR 5/4) light brown; very stiff; dry to moist; no odor; slight micaceous 1050 11.6 20 13 1050 20 SANDY SILT; ML; (10YR 4/2) dark CB-1@20' ML 17 yellowish brown; very stiff; dry to moist; no 19 odor; slight micaceous 1051 18.9 25 1051 25 15 SANDY CLAY; CL; (10YR 4/2) dark CB-1@25' 15 yellowish brown; fine-grained; hard; dry; no 18 1054 26.3 30. 1054 10 30 CB-1@30' SM SILTY SAND; SM; (5Y 5/2) light olive gray; 11 fine-grained; medium dense; dry to moist; no 17 odor; mottled; micaceous GDT 1058 SECOR 22.4 35. 1058 35 CB-1@35' SANDY SILT; ML; (10Y 4/2) grayish olive; 12 very stiff; moist; no odor; mottled; micaceous 9-1834.GPJ Bentonite 1102 Grout 122 40 12 1102 40 ML. CLAYEY SILT; ML; (5Y 4/4) olive brown; CB-1@40' 13 very stiff; dry to moist; no odor

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-1 SECOR PROJECT NUMBER: 08CH.51834.05 PAGE 2 OF 2 EASTING (ft): NORTHING (ft): COMPLETED: 10/18/05 DRILLING: STARTED 10/18/05 LONGITUDE: LATITUDE: **COMPLETED: 10/18/05** INSTALLATION: STARTED 10/18/05 GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade BOREHOLE DEPTH (ft): 76.5 INITIAL DTW (ft): NE DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (in):8 DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---CHECKED BY: OR Pello LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Measured Recov. (feet) Sample eadspac PID (units) Blow Count Graphic Log USCS Depth (feet) Borehole Time & Depth (feet) Time Description Backfill Sample ID ML 1104 29.5 45 1104 45 13 CB-1@45' ML SANDY SILT: ML; (5Y 4/4) olive brown; 15 very stiff; dry to moist; no odor; mottled; slight micaceous 1106 19.6 50 1106 50 11 SANDY SILT WITH CLAY, (10Y 4/2) CB-1@50' 14 grayish olive; fine to medium-grained; hard; 18 moist; no odor; mottled 1113 70.5 55 1113 55 12 CB-1@55' ML SANDY SILT: ML: (5Y 3/2) olive gray; 13 fine-grained; very stiff; moist; slight HC odor; slight micaceous 1116 2864 60 1116 60 13 CB-1@60' SM SILTY SAND; SM; (N2) dark gray; fine to 13 medium-grained; medium dense; wet; strong 16 HC odor; slight micaceous 1136 860 65 1136 65 SP SAND; SP; (5Y 3/2) olive gray; fine to CB-1@65' medium-grained; medium dense; wet; HC 12 odor, slight micaceous SP SAND WITH SILT; SP; (10YR 4/2) dark 1143 yellowish brown; fine to medium-grained; 198 70 1143 70 7 CB-1@70' medium dense; wet; slight HC odor; slight micaceous, at 70' bgs becomes gravelly with 15 ML SANDY SILT; ML; (10YR 6/6) dark 9-1834.GPJ SECOR INTL.GDT 12/5/05 yellowish orange; very stiff; dry; slight HC odor: mottled 1203 241 75-1203 75 9 CLAYEY SILT: ML; (10YR 5/4) yellowish CB-1@75' МL 12 brown; very stiff; dry; slight HC odor; mottled Hole terminated at 76.5 feet. 80 80

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-2 SECOR PROJECT NUMBER: 08CH.51834.05 PAGE 1 OF 2 NORTHING (ft): EASTING (ft): DRILLING: STARTED 10/18/05 **COMPLETED: 10/18/05** LONGITUDE: LATITUDE: COMPLETED: 10/18/05 INSTALLATION: STARTED 10/18/05 GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft): 66.5 **DRILLING EQUIPMENT: CME 75** STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (in):8
CHECKED BY: CR PRODUCTION DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---SAMPLING EQUIPMENT: Split Spoon LOGGED BY: T. Barrett Sample Graphic Log leadspac PID (units) Blow Count Time 8 Depth (feet) uscs Recov. (feet) Depth (feet) Borehole Time Description Backfill Sample ID SM SILTY SAND; SM; (10YR 4/2) dark Soil yellowish brown; fine to medium-grained; Bentonite loose; dry; no odor; slight micaceous Chips (Air Knife 0-8' bgs) Concrete chunks observed @ 3' bgs 5 SANDY SILT WITH CLAY, ML; (5YR 5/6) ML light brown; fine-grained; very stiff; dry to moist: no odor 1302 10 11.1 1302 10 CB-2@10' 9 1304 6.6 15 1304 15 8 SANDY SILT WITH CLAY, ML; (5YR 4/4) CB-2@15' ML 9 light brown; fine-grained; very stiff; dry to 9 moist; no odor 1307 1307 20 10 10.8 20 SANDY SILT; ML; (5YR 4/4) light brown; CB-2@20' ML 12 fine-grained; very stiff; dry to moist; no odor 16 1310 7.0 25 1310 25 12 CB-2@25' SANDY SILT; ML; (10YR 4/2) dark ML 14 yellowish brown; fine to medium-grained; 16 very stiff; dry to moist; no odor; mottled 1313 30 9.8 1313 30 14 CB-2@30' SANDY SILT; ML; (10Y 4/2) grayish olive; ML 15 SECOR INTL.GDT 12/2/05 fine-grained; hard; dry; no odor; mottled; 18 slight micaceous Bentonite 1316 Grout 1316 35 13 7.0 35 SANDY SILT; ML; (10Y 4/2) grayish olive; CB-2@35' ML 13 fine-grained; very stiff; dry; no odor; 9-1834.GPJ 15 micaceous 1318 9.6 40 1318 40 13 CB-2@40' SANDY SILT WITH CLAY, ML; (5Y 4/4) ML 18 light olive brown; fine-grained; hard; dry to moist; no odor; mottled; slight micaceous

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-2 SECOR PROJECT NUMBER: 08CH.51834.05 PAGE 2 OF 2 EASTING (ft): NORTHING (ft): DRILLING: STARTED 10/18/05 COMPLETED: 10/18/05 LATITUDE: LONGITUDE: COMPLETED: 10/18/05 INSTALLATION: STARTED 10/18/05 TOC ELEV (ft): GROUND ELEV (ft): DRILLING COMPANY: Cascade BOREHOLE DEPTH (ft): 66.5 INITIAL DTW (ft): NE DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): -DRILLING METHOD: HSA BOREHOLE DIAMETER (in):8
CHECKED BY: OK PRODUCE WELL CASING DIAMETER (in): ---LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample eadspac PID (units) Graphic Log Blow Count uscs Recov. (feet) Depth (feet) Time & Depth (feet) Borehole Time Description Sample ID Backfill ML 1321 13.9 45 1321 45-14 CB-2@45' ML SILT: ML: (5Y 4/4) light olive brown; hard; 17 dry to moist; no odor; mottled; slight 19 micaceous 1325 10.8 50 1325 50-10 SANDY SILT WITH CLAY, ML; (10YR 4/2) CB-2@50' ML 10 dark yellowish brown; fine-grained; very stiff; 12 dry to moist; no odor; mottled 1328 11.1 55 1328 55 16 SANDY SILT; ML; (5Y 3/2) olive gray; fine-grained; hard; dry to moist; no odor; ML CB-2@55' 17 20 mottled; slight micaceous 1331 4.3 60 1331 60 9 SAND: SP: (5Y 4/4) light olive brown; fine CB-2@60' 11 to medium-grained; medium dense; wet; no 14 odor 1335 65 5.4 1335 65 17 SP SILTY SAND; SP; (5Y 4/4) light olive CB-2@65' 17 brown; fine to medium-grained; dense; wet; 21 no odor; slight micaceous Hole terminated at 66.5 feet. 70 70 GEO FORM 304 9-1834.GPJ SECOR INTL.GDT 12/2/05 75 75 80 80

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-3 SECOR PROJECT NUMBER: 08CH.51834.05 PAGE 1 OF 2 EASTING (ft): NORTHING (ft): DRILLING: STARTED 10/18/05 COMPLETED: 10/18/05 LATITUDE: LONGITUDE: COMPLETED: 10/18/05 INSTALLATION: STARTED 10/18/05 GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft):71.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---DRILLING METHOD: HSA BOREHOLE DIAMETER (in) B CHECKED BY: CRECO WELL CASING DIAMETER (in):---LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample Graphic Log uscs Recov. Blow Count eadspa PID (units) Depth (feet) Time Borehole Description Sample ID Backfill SM SILTY SAND; SM; (10YR 4/2) dark Soil yellowish brown; fine to medium-grained; **Bentonite** loose; dry; no odor; slightly micaceous Chips (Air Knife 0-8' bgs) Asphalt chunks observed @ 7' bgs 5 SANDY SILT; ML; (10YR 4/)2 dark yellowish brown; fine-grained; very stiff; dry to moist; no odor; mottled 1424 1424 10 3.1 10 9 CB-3@10' 11 17 1426 1426 15 4.8 15 10 ML SANDY SILT WITH CLAY, ML; (5YR 2/2) CB-3@15' 13 dark brown; fine-grained; very stiff; dry to 13 moist; no odor; mottled; slightly micaceous 1430 1430 20 7.9 20 12 ML SANDY SILT WITH CLAY, ML; (10YR 4/2) CB-3@20' 13 dark yellowish brown; fine-grained; very stiff; 18 dry to moist; no odor; mottled; slightly micaceous 1435 1435 25 9.0 25 16 CL SANDY CLAY; CL; (10YR 5/4) light CB-3@25' 17 yellowish brown; fine-grained; hard; dry to moist; no odor 1440 9.4 30 1440 30 SILTY SAND; SM; (10YR 4/2) dark 11 SM CB-3@30' 12 vellowish brown; fine to medium-grained; medium dense; dry to moist; no odor; slightly micaceous SECOR INTL.GDT 1443 443 35 8.8 35 17 SANDY SILT; ML; (10YR 5/4) light CB-3@35' ML 17 yellowish brown; fine-grained; hard; dry to 19 9-1834.GPJ moist; no odor; slightly micaceous Bentonite Grout 1447 1447 40 4.2 40 17 ML SANDY SILT; ML; (10YR 4/2) dark CB-3@40' 18 yellowish brown; fine-grained; hard; moist; no 21 odor; mottled; slightly micaceous

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-3 SECOR PAGE 2 OF 2 PROJECT NUMBER: 08CH.51834.05 EASTING (ft): NORTHING (ft): **COMPLETED: 10/18/05** STARTED 10/18/05 DRILLING: LATITUDE: LONGITUDE: INSTALLATION: STARTED 10/18/05 **COMPLETED: 10/18/05** GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft): 71.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (in):8
CHECKED BY: DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Measured Recov. (feet) Sample adspa PID (units) Graphic Log Blow USCS Depth (feet) Borehole Time 8 Depth (feet) Time Description Sample ID Backfill ML 1451 8.5 45 1451 45 14 CB-3@45' SANDY SILT WITH CLAY, ML; (10YR 5/4) ML 15 light yellowish brown; fine-grained; very stiff; 15 dry; no odor; mottled; slightly micaceous 1456 50 10.0 1456 50 13 CB-3@50' ML SANDY SILT; ML; (10YR 5/4) light 15 vellowish brown; fine-grained; hard; dry to 17 moist; no odor; mottled; slightly micaceous 1525 1525 55 40 55 CB-3@55' SANDY SILT; ML; (5Y 3/2) olive gray; 10 fine-grained; very stiff; moist; HC odor, 14 mottled 1529 13.2 60 1529 60 CB-3@60' 11 SP SAND WITH SILT; SP; (10YR 4/2) dark 11 yellowish brown; fine to medium-grained; 15 medium dense; wet; no odor 1532 11.2 65 1532 65-12 CB-3@65' SANDY SILT; ML; (10YR 4/2) dark ML 15 yellowish brown; fine-grained; hard; wet; no odor; mottled; slightly micaceous 1544 1544 70 3.8 70-12 CB-3@70' 15 Hole terminated at 71.5 feet. GEO FORM 304, 9-1834.GPJ SECOR INTL.GDT 12/2/05 75 75 80 80

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-4 SECOR PAGE 1 OF 2 PROJECT NUMBER: 08CH.51834.05 COMPLETED: 10/19/05 NORTHING (ft): EASTING (ft): STARTED 10/19/05 DRILLING: LATITUDE: LONGITUDE: COMPLETED: 10/19/05 INSTALLATION: STARTED 10/19/05 GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft):81.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---DRILLING METHOD: HSA WELL CASING DIAMETER (in):---BOREHOLE DIAMETER (in) 8 CHECKED BY: CREECE SAMPLING EQUIPMENT: Split Spoon LOGGED BY: T. Barrett Sample eadspac PID (units) Graphic Log Blow Count uscs Depth (feet) Borehole Time Description Backfill Sample ID SILTY SAND; SM; (10YR 4/2) dark SM Soil yellowish brown; fine to medium-grained; Bentonite loose; dry; no odor; slightly micaceous Chips (Air Kinfe 0-8' bgs) 5 SANDY SILT; ML; (10YR 4/2) dark yellowish brown; fine-grained; very stiff; dry to moist; no odor; slightly micaceous 0930 10 0.8 0930 10 11 CB-4@10' 12 15 0934 15 0.9 0934 15 11 CB-4@15' Same as above, except not micaceous 12 15 0936 1.0 20-0936 20 13 CB-4@20' Same as above 13 15 0938 8.0 25-0938 25 12 CB-4@25' Same as above, becomes mottled 13 17 0940 1.3 30 0940 10 CB-4@30' SILTY SAND; SM; (10YR 4/2) dark SM 14 SECOR INTL.GDT 12/5/05 yellowish brown; fine-grained; dense; moist; 18 no odor 0943 1.4 35 35 0943 11 CB-4@35' CLAYEY SAND; SC; (10YR 4/2) dark yellowish brown; fine-grained; medium 17 9-1834.GPJ dense; dry; no odor; mottled; slightly micaceous 0946 1.3 40 0946 40 13 CB-4@40' SANDY SILT; ML; (10Y 4/2) grayish olive; ML 17 fine-grained; hard; dry; no odor; mottled; 19 micaceous Bentonite

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA **CB-4** SECOR PAGE 2 OF 2 PROJECT NUMBER: 08CH.51834.05 EASTING (ft): NORTHING (ft): STARTED 10/19/05 **COMPLETED: 10/19/05** DRILLING: LATITUDE: LONGITUDE: COMPLETED: 10/19/05 INSTALLATION: STARTED 10/19/05 TOC ELEV (ft): GROUND ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft): 81.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (in):8
CHECKED BY: OR Police DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample Blow Depth (feet) USCS Borehole Time & Depth (feet) Graphi Log Time Description Backfill Sample ID Grout ML 0950 0.8 45 0950 45 13 ML SANDY SILT; ML; (10Y 4/2) grayish olive; CB-4@45' 17 fine-grained; hard; dry to moist; no odor; 18 mottled; micaceous 0953 5.0 50 0953 50 13 CB-4@50' SILTY SAND; SM; (10Y 4/2) grayish olive; SM 13 fine to medium-grained; dense; dry to moist; no odor; mottled; slightly micaceous 0956 432 55 0956 55 15 CB-4@55' SM SILTY SAND; SM; (N1) black; fine-grained; 15 dense; wet; strong HC odor 15 1000 3,100 60 1000 60 17 CB-4@60' SP SAND; SP; (10Y 4/2) dark yellowish brown; 18 fine to medium-grained; dense; wet; slight 19 HC odor; mottled 1003 1003 65 2.800 65 13 CB-4@65' SP SAND: SP: (10Y 4/2) dark yellowish brown; 17 fine to medium-grained; dense; wet; slight 18 HC odor; mottled 1006 5.0 70 1006 70 18 CB-4@70' SM SILTY SAND; SM; (10YR 5/4) light 19 yellowish brown; fine to medium-grained; 26 dense; wet; slight HC odor SECOR INTL.GDT 1020 9.1 75 1020 75 17 SILTY SAND; SM; (10YR 4/2) dark CB-4@75' SM 18 vellowish brown; fine to medium-grained; dense; moist; slight HC odor 9-1834.GPJ 1038 80 6.6 038 80 11 CLAYEY SILT WITH GRAVEL ML; (10YR CB-4@80' ML 13 4/2) dark yellowish brown; very stiff; moist; FORM 304 16 <u>no odo</u>r Hole terminated at 81.5 feet.

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-5 SECOR PAGE 1 OF 2 PROJECT NUMBER: 08CH.51834.05 NORTHING (ft): EASTING (ft): STARTED 10/19/05 **COMPLETED: 10/19/05** DRILLING: LONGITUDE: LATITUDE: COMPLETED: 10/19/05 INSTALLATION: STARTED 10/19/05 GROUND ELEV (ft): TOC ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft): 71.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---BOREHOLE DIAMETER CHECKED BY: CREEK LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample Blow Count eadspar PID (units) USCS Depth (feet) Graphic Log Borehole Time Description Backfill Sample ID SILTY SAND; SM; 10YR 4/2 dark yellowish SM Soil brown; fine to medium-grained; loose; dry; no Bentonite odor; slightly micaceous Chips (Air Knife 0-8'bgs) 5 SANDY SILT; ML; 10YR 4/2 dark yellowish ML brown; fine-grained; very stiff; dry to moist; no odor 1140 8.0 10 10 6 CB-5@10' 9 15 1143 7.6 13 13 15 15 CB-5@15' Same as above 15 1145 10.3 20 20 11 CB-5@20' Same as above, except becomes hard and 17 mottled 18 1148 13.3 25 13 CB-5@25' SILTY SAND; SM; 10YR 5/4 light yellowish SM 13 brown: fine to medium-grained; medium 15 dense; dry to moist; no odor 1152 30 30 17 1.8 CB-5@30' SILTY SAND; SM; 10YR 4/2 dark yellowish SM 17 GEO FORM 304 9-1834.GPJ SECOR INTL.GDT 12/2/05 brown; fine-grained; dense; dry to moist; no 19 odor; mottled; slightly micaceous 1155 6.2 35 35 11 CB-5@35' SM SILTY SAND; SM; 10YR 4/2 dark yellowish 13 17 brown; fine to medium-grained; dense; moist; no odor; mottled; slightly micaceous Bentonite Grout 1158 10.8 40 40 CB-5@40' Same as above, except with clay intrusions 17 19

PROJECT: Chevron 9-1834 WELL / PROBEHOLE / BOREHOLE NO: LOCATION: 4175 Voltaire Street San Diego, CA CB-5 SECOR PAGE 2 OF 2 PROJECT NUMBER: 08CH.51834.05 EASTING (ft): COMPLETED: 10/19/05 NORTHING (ft): STARTED 10/19/05 DRILLING: LATITUDE: LONGITUDE: COMPLETED: 10/19/05 INSTALLATION: STARTED 10/19/05 TOC ELEV (ft): GROUND ELEV (ft): DRILLING COMPANY: Cascade INITIAL DTW (ft): NE BOREHOLE DEPTH (ft): 71.5 DRILLING EQUIPMENT: CME 75 STATIC DTW (ft): NE WELL DEPTH (ft): ---BOREHOLE DIAMETER (IN CHECKED BY: DRILLING METHOD: HSA WELL CASING DIAMETER (in): ---LOGGED BY: T. Barrett SAMPLING EQUIPMENT: Split Spoon Sample Time & Depth (feet) Blow Graphic Log uscs Borehole Time Description Backfill Sample ID SM 1201 8.6 45 11 45 SM SILTY SAND; SM; 10YR 4/2 dark yellowish CB-5@45' 17 brown; fine to medium-grained with trace 17 coarse-grained; dense; dry; no odor; mottled; micaceous 1205 14.3 50 50 17 CB-5@50' Same above with subrounded to rounded 18 gravel (~20x20mm) 1208 9.0 55 55 17 CB-5@55' SM SILTY SAND; SM; 10YR 4/2 dark yellowish 19 brown; fine to medium-grained; dense; moist; no odor; slightly micaceous 1211 8.8 60-60 13 SP SAND; SP; 10YR 4/2 dark yellowish brown; CB-5@60' 17 fine to medium-grained; dense; wet; no odor; 21 micaceous 1215 15.8 65 65 12 CB-5@65' SP SAND: SP: 10YR 4/2 dark yellowish brown; 14 medium to coarse-grained; dense; wet; no 19 1219 7.8 70 70 13 SILTY SAND; SM; 10YR 4/2 dark yellowish CB-5@70' SM 15 brown; fine to medium-grained; dense; wet; Hole terminated at 71.5 feet. GEO FORM 304 9-1834.GPJ SECOR INTL.GDT 12/2/05 75 75 80 80

DEFINITION OF TERMS

	PRIMARY DIVISIONS		GRAPHIC SYMBOL	GROUP SYMBOL	SECONDARY DIVISIONS
COARSE GRAINED SOILS More Than Half Of Material Is Larger Than No. 200 Sieve Size			GW	Well graded gravels, gravel-sand mixtures, little or no fines.	
	GRAVELS More Than Half Of Coarse	(Less Than 5% Fines)		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
	Fraction Is Larger Than No. 4 Sieve	Gravel With		GM	Clayey gravels, gravel-sand-clay mixtures, non-plastic fines.
		Fines		GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	SANDS	Clean Sands (Less Than 5%		sw	Well graded sands or gravelly sands, little or no fines.
	More Than Half Of Coarse Fraction Is Smaller Than No. 4 Sieve	Fines)		SP	Poorly graded sands or gravelly sands, little or no fines.
		Sands With Fines		SM	Silty sands, sand-silt mixtures, plastic fines.
				SC	Clayey sands, sand-clay mixtures, plastic fines.
	SILTS AND CLAYS Liquid Limit Is Less Than 50%			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
FINE GRAINED SOILS More Than Half Of Material Is Smaller Than No. 200 Sieve Size				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.	
	SII TS AND		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	
	SILTS AND CLAYS Liquid Limit Is Greater Than 50%			СН	Inorganic clays of high plasticity, fat clays.
				OH	Organic clays of medium to high plasticity, organic silts.
	HIGHLY ORGANIC S	OILS	i gita kizi kizi Mending Mendan Kanbinangalan	PT	Peat and other highly organic soils.

SECOR

INTERNATIONAL INCORPORATED 2655 CAMINO DEL RIO N., SUITE 302 SAN DIEGO, CA. 92108 BOREHOLE/WELL LOG LEGEND

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GRAIN SIZES

	L	J.S. Standar	d Series (Sleve		Clear Square Sieve Openings			-	
	200	40	1	0	4	3/	4" (3"	12"	
SILT and CLAYS		SAND			GRAVEL		COBBLES	S BOLL	BOULDERS	
OIL) BIIG OLI (, O	Fin	e M	edium	Coarse		Fine	Coarse			

RELATIVE DENSITY

Sand and Gravels	Blows/Foot [†]
Very Loose	0 - 4
Loose	4-10
Medium Dense	10-30
Dense	30-50
Very Dense	Over 50

CONSISTENCY

Silt and Clays	Strength ‡	Blows/Foot†
Very Loose Soft	0 - 1/4 1/4 - 1/2	0 - 2 2 - 4
Firm	1/2 - 1	2 - 4
Stiff	1-2	8 - 16
Very Stiff	2-4	16 - 32
Hard	Over 4	Over 32

- Number of blows of 140 pound hammer falling approximately 30 inches to drive a 2 inch O.D. (1-3/8 inch I.D.) standard pentetration test (SPT) split spoon (ASTM D-1586).
- Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

Graphic Log Symbols



Liquid-Phase Hydrocarbons/ Phase Separated Hydrocarbons



Ground Water (Static)



Ground Water (Initial)

Well Design Symbol



Centralizer

Abbreviations Used

MSL Mean Sea Level

A/C Asphalt/Concrete

Bent Bentonite

Below Ground Surface

Diameter

Feet

LPH Liquid-Phase Hydrocarbons

PSH Phase Separated Hydrocarbons

GW Groundwater

HC Hydrocarbon

Inches

med Medium

mod Moderate

NA Not Analyzed

NE Not Encountered

NR Not Recorded

Parts Per Million

Well Design Fill Patterns



Asphalt

Concrete

Concrete Slurry

Bentonite

Bentonite Grout

Sand

Screened Interval

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